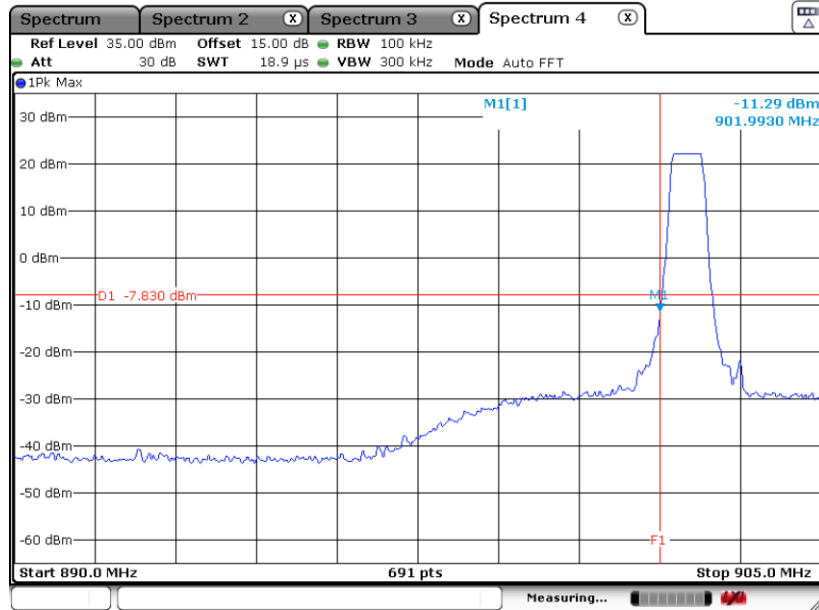




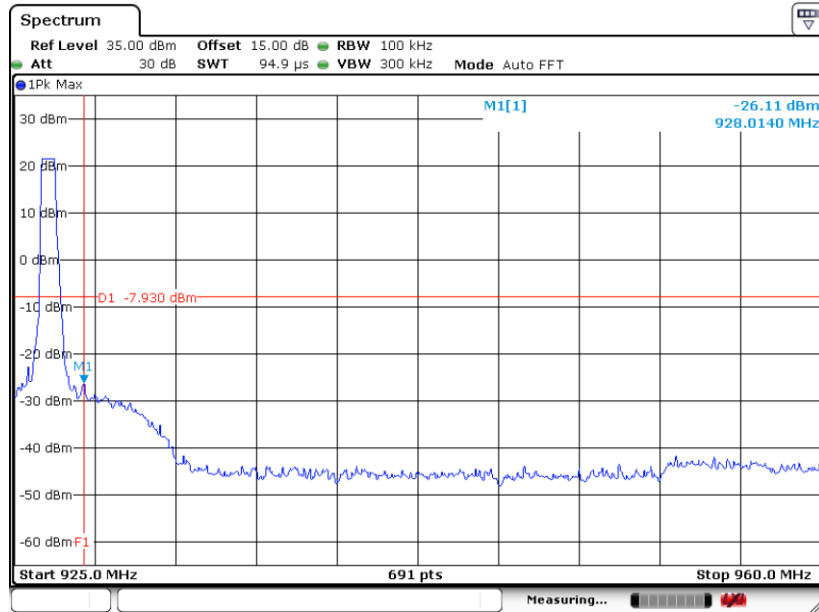
For SF9:

Low Band Edge Plot on 902.5 MHz



Date: 25 JUN 2022 15:07:29

High Band Edge Plot on 926.5 MHz

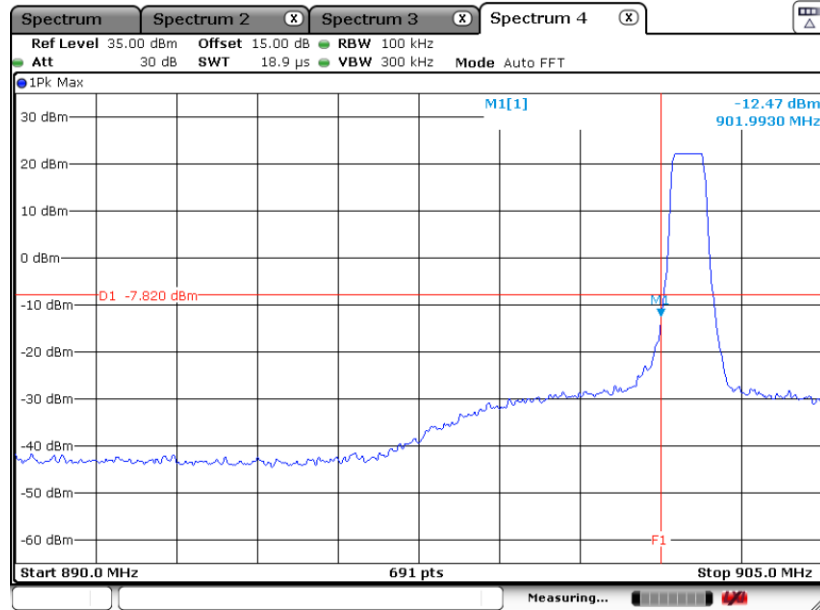


Date: 2.AUG.2022 16:42:06



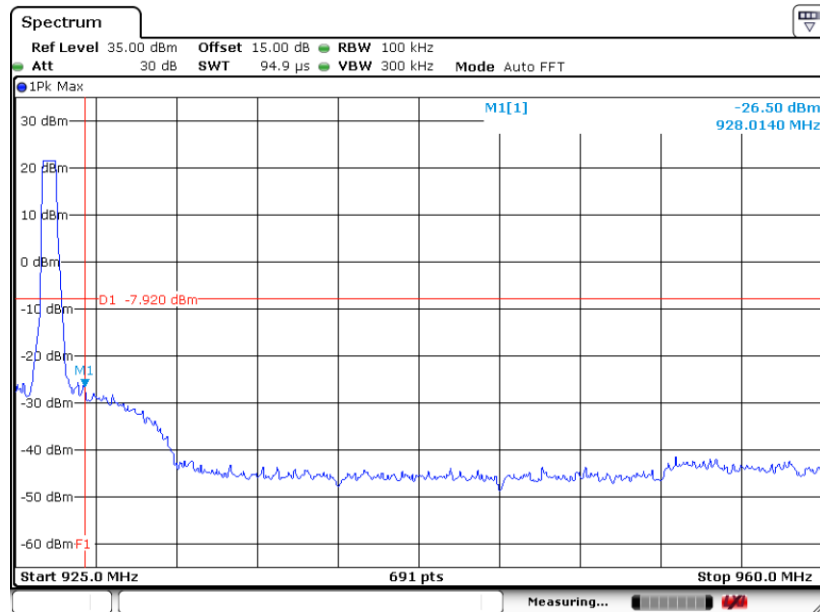
For SF10:

Low Band Edge Plot on 902.5 MHz



Date: 25 JUN 2022 15:54:00

High Band Edge Plot on 926.5 MHz

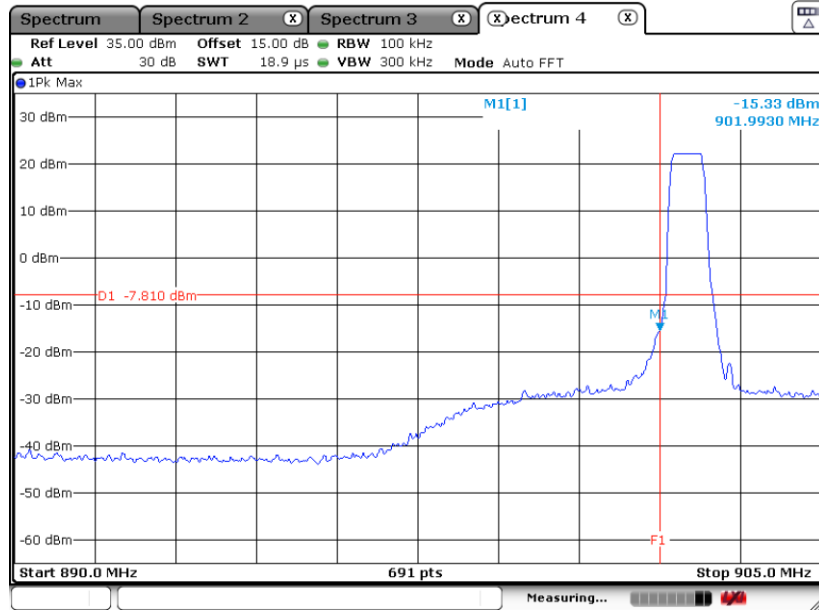


Date: 2.AUG.2022 16:43:18



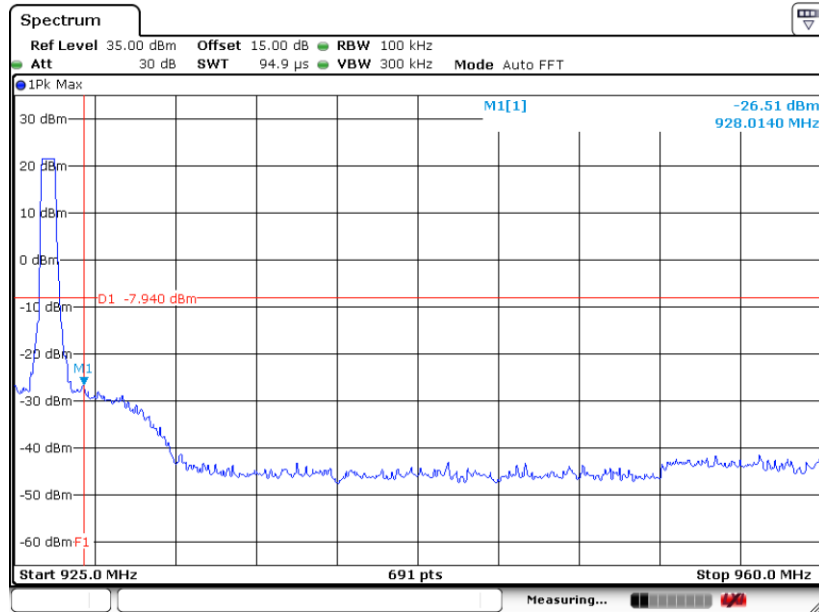
For SF11:

Low Band Edge Plot on 902.5 MHz



Date: 25 JUN 2022 16:20:42

High Band Edge Plot on 926.5 MHz



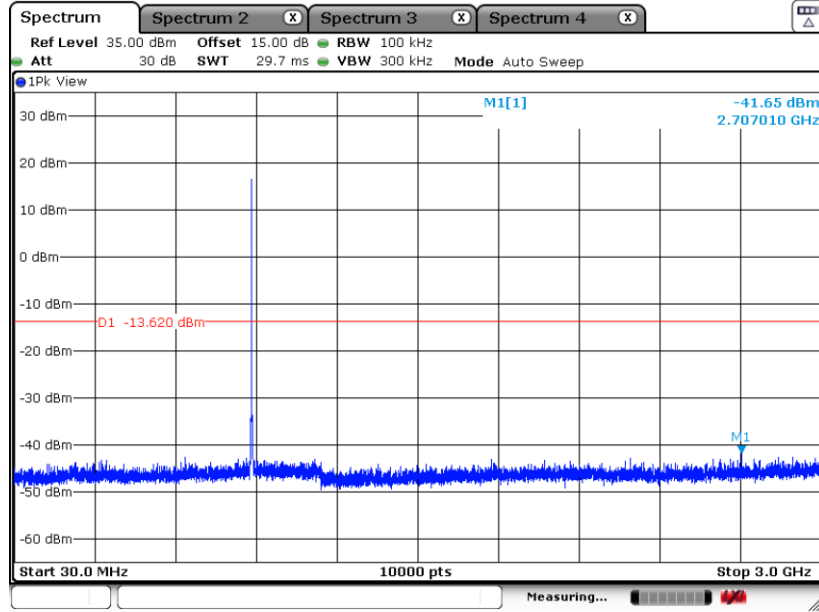
Date: 2 AUG 2022 16:43:56



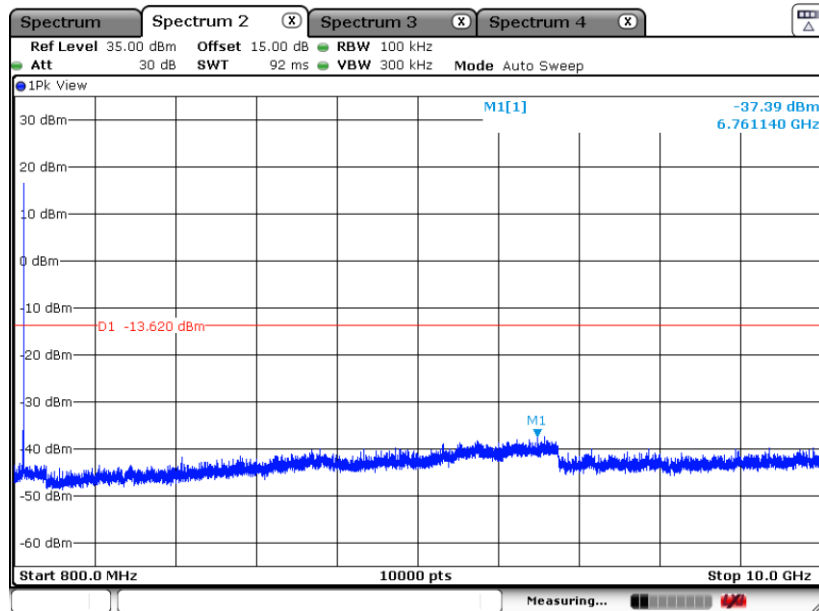
3.4.6 Test Result of Conducted Spurious Emission Plots

For SF5:

Conducted Spurious Emission Plot on 902.5 MHz

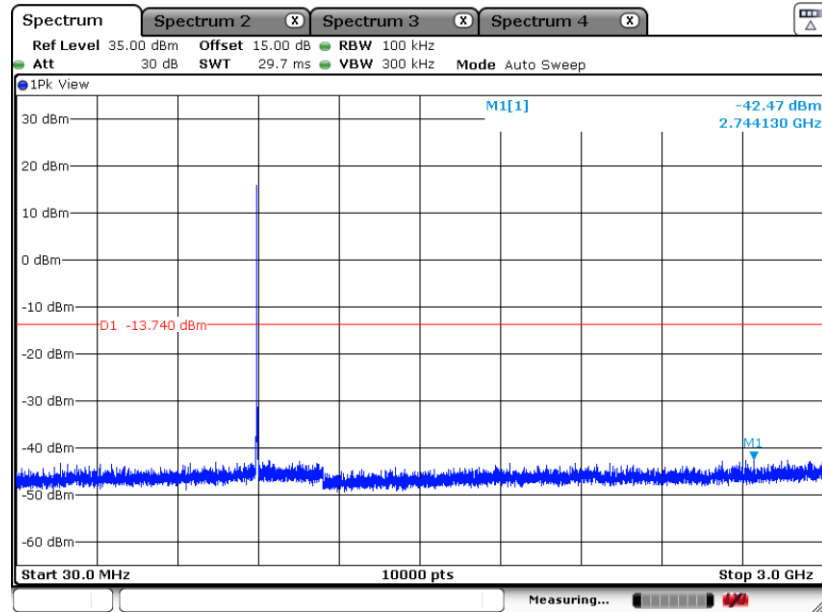


Conducted Spurious Emission Plot on 902.5 MHz



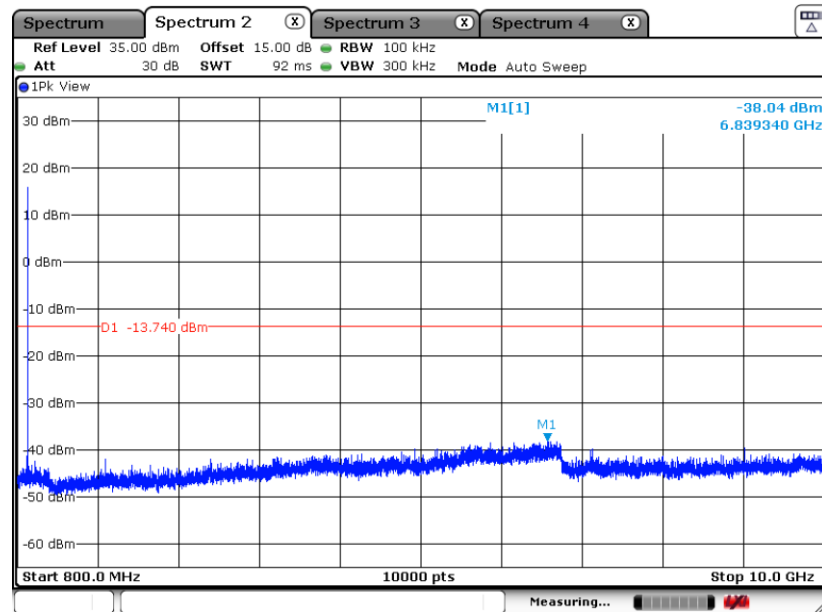


Conducted Spurious Emission Plot on 914.5 MHz



Date: 6.JUL.2022 19:40:12

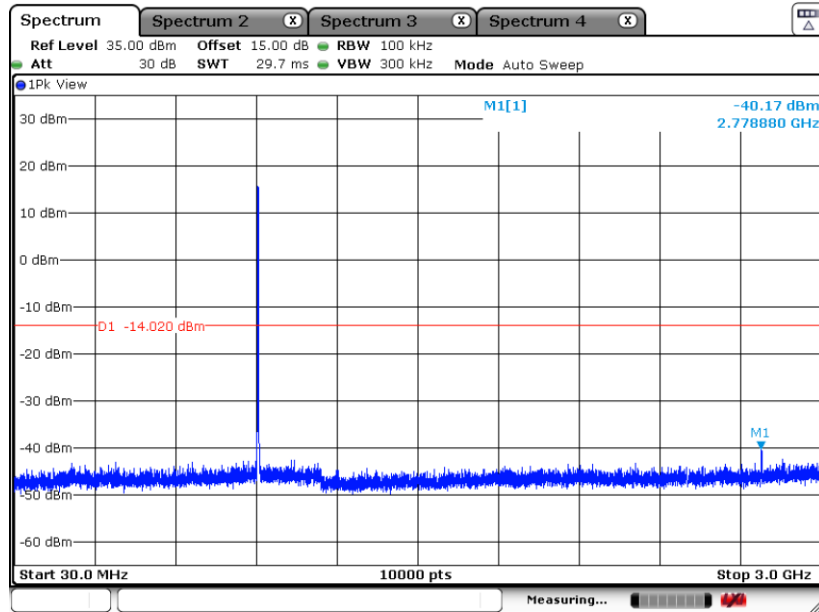
Conducted Spurious Emission Plot on 914.5 MHz



Date: 6.JUL.2022 19:40:58

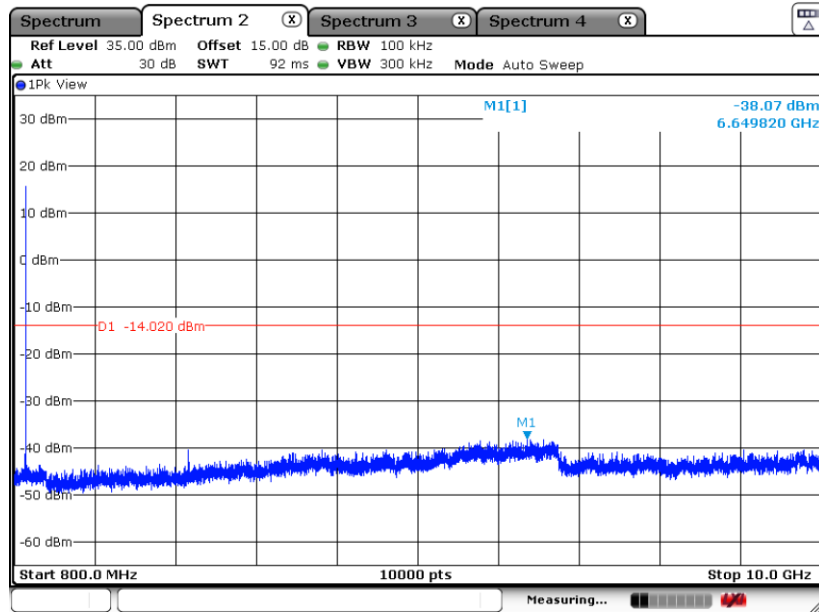


Conducted Spurious Emission Plot on 926.5 MHz



Date: 6.JUL.2022 19:41:48

Conducted Spurious Emission Plot on 926.5 MHz

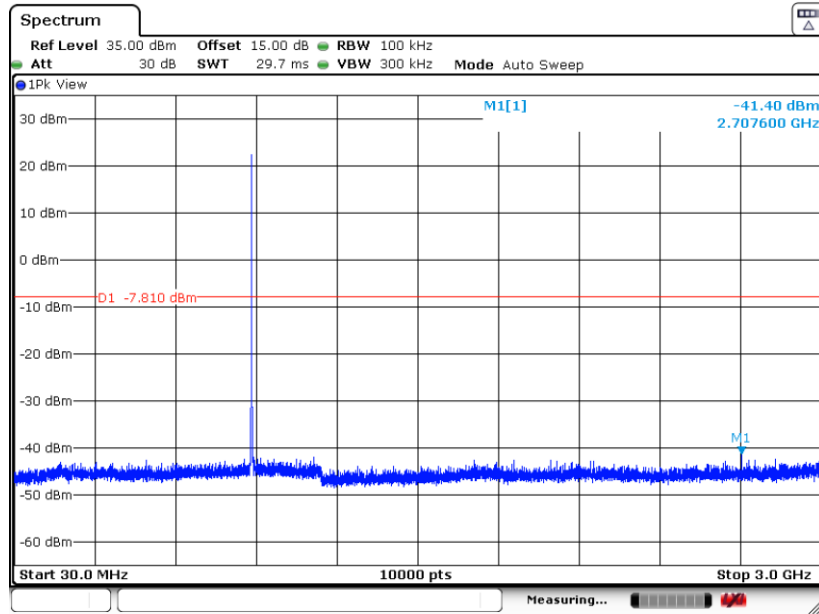


Date: 6.JUL.2022 19:43:00



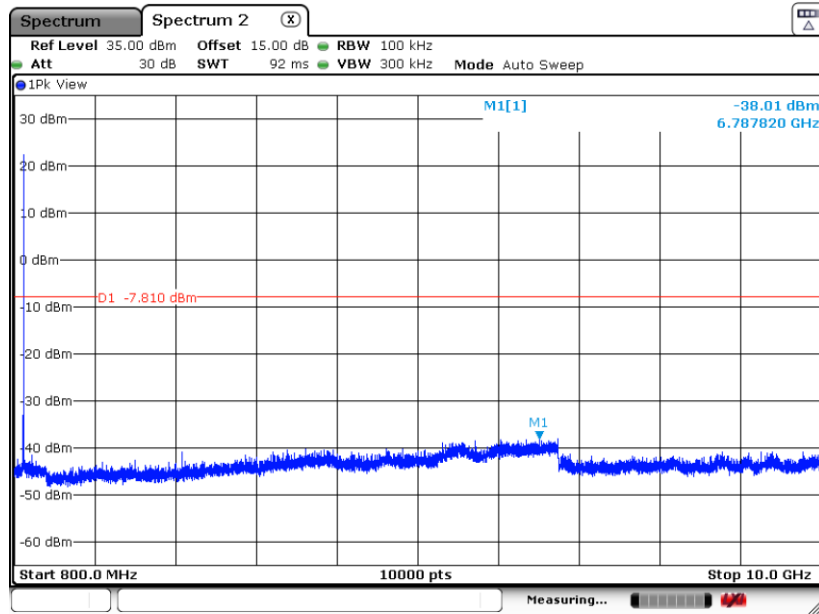
For SF7:

Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 13:06:26

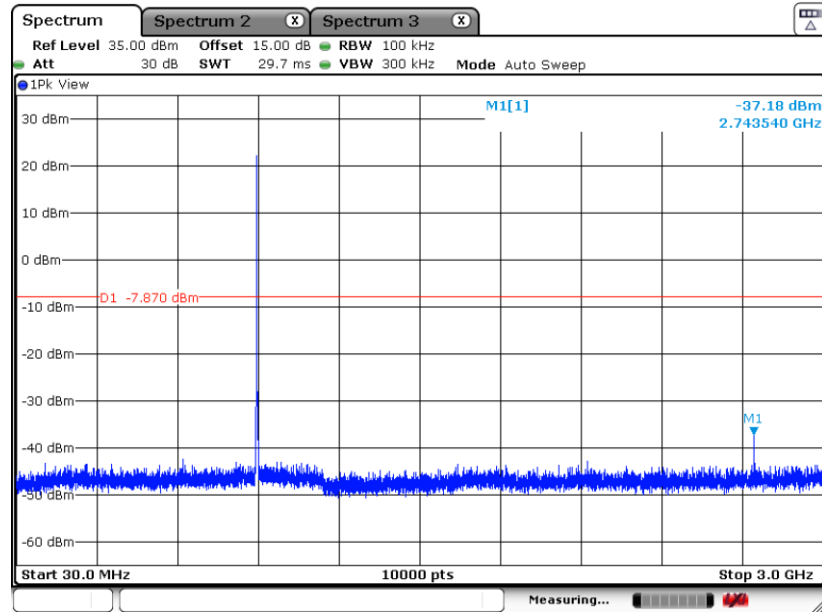
Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 13:11:50

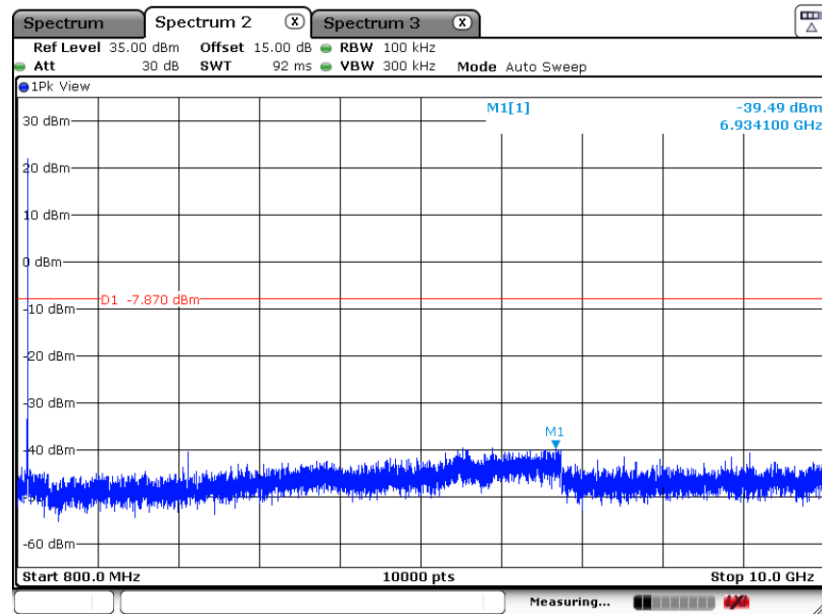


Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN 2022 13:20:02

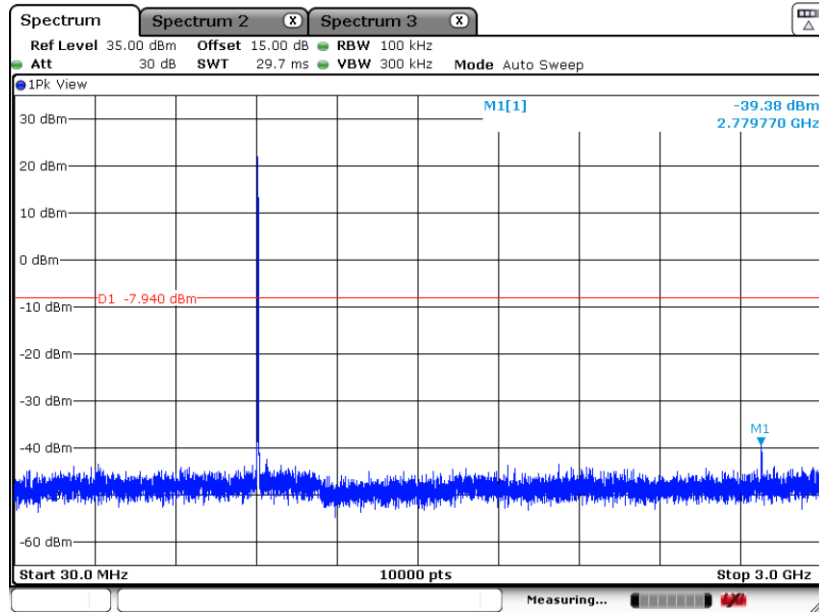
Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN 2022 13:20:35

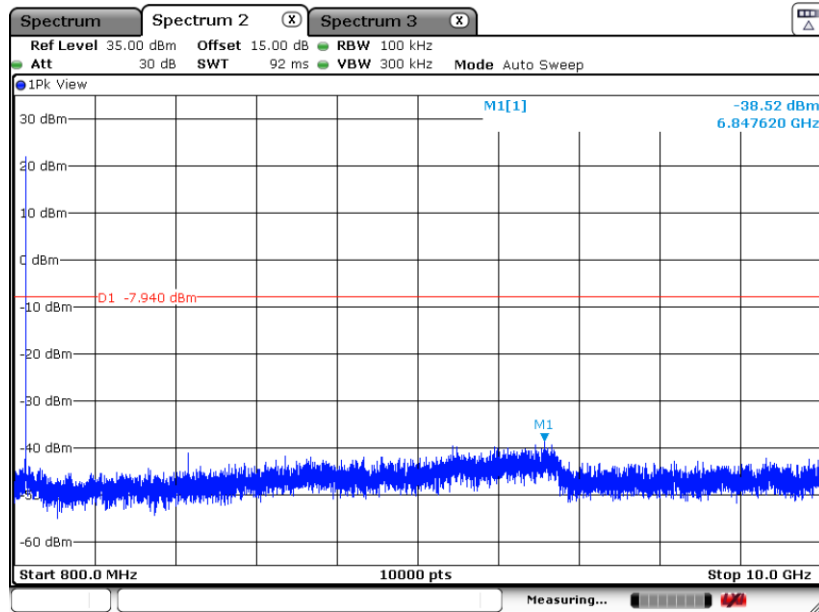


Conducted Spurious Emission Plot on 926.5 MHz



Date: 25 JUN 2022 13:23:43

Conducted Spurious Emission Plot on 926.5 MHz

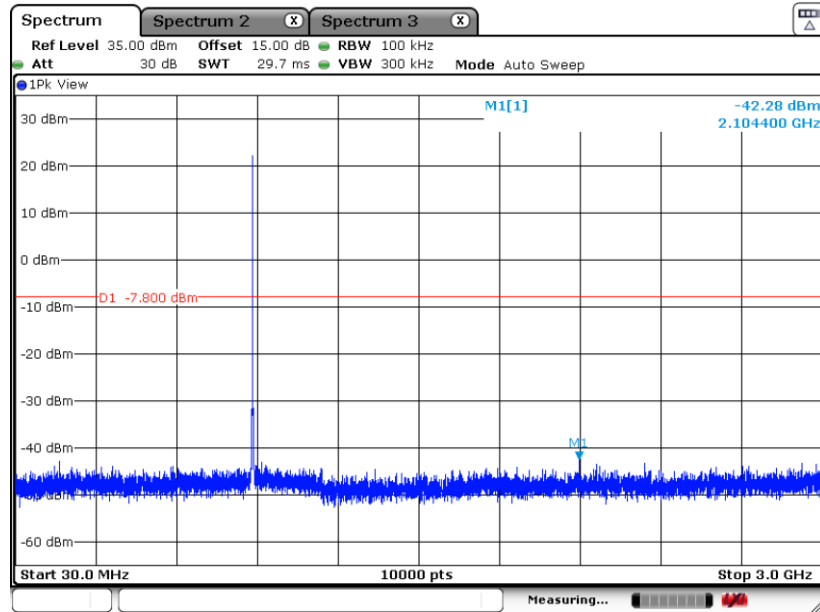


Date: 25 JUN 2022 13:24:37



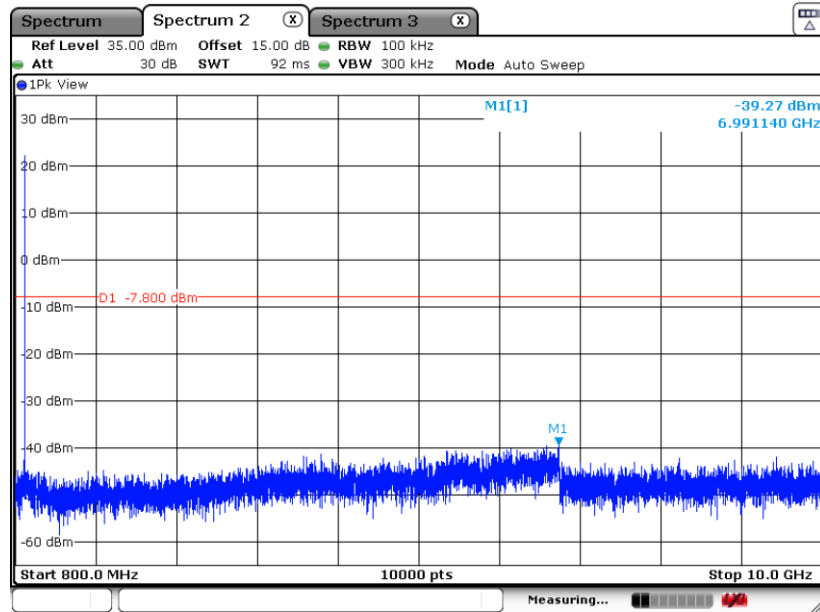
For SF8:

Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 14:17:25

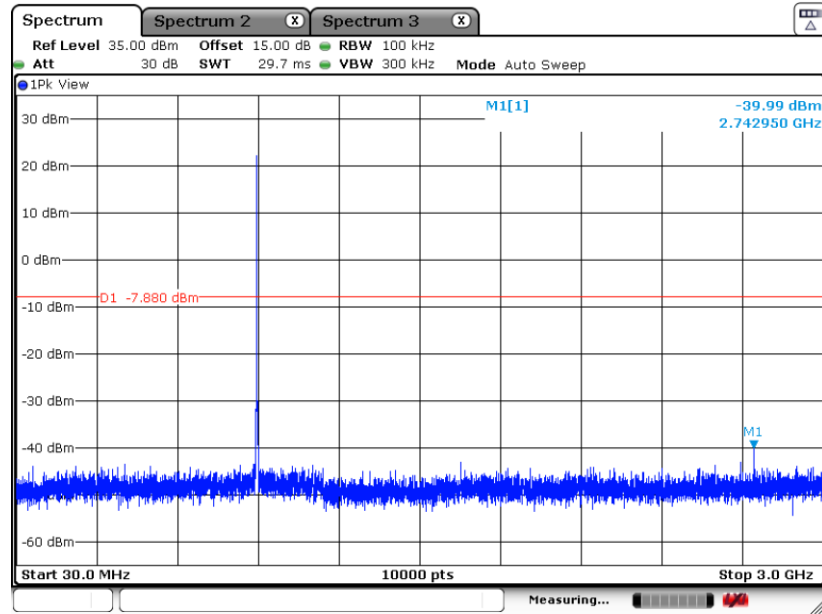
Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 14:17:45

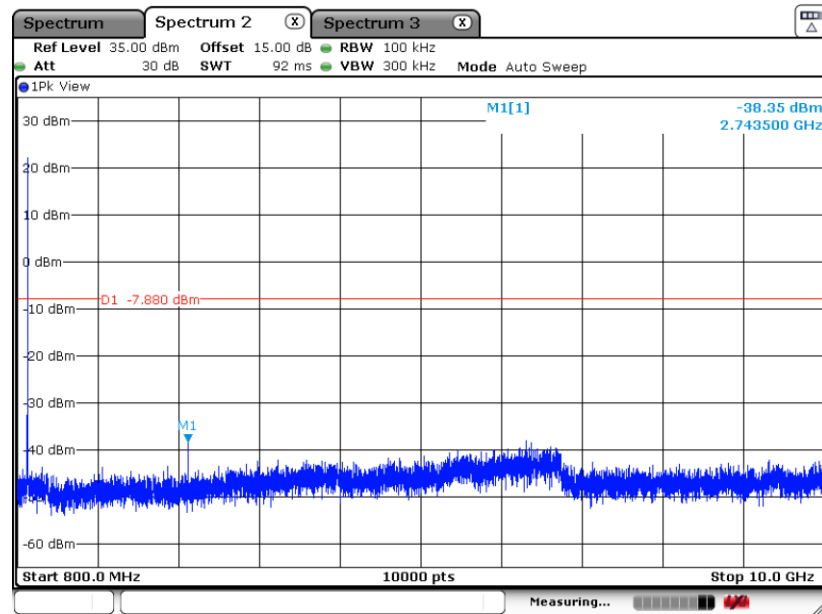


Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN.2022 14:13:25

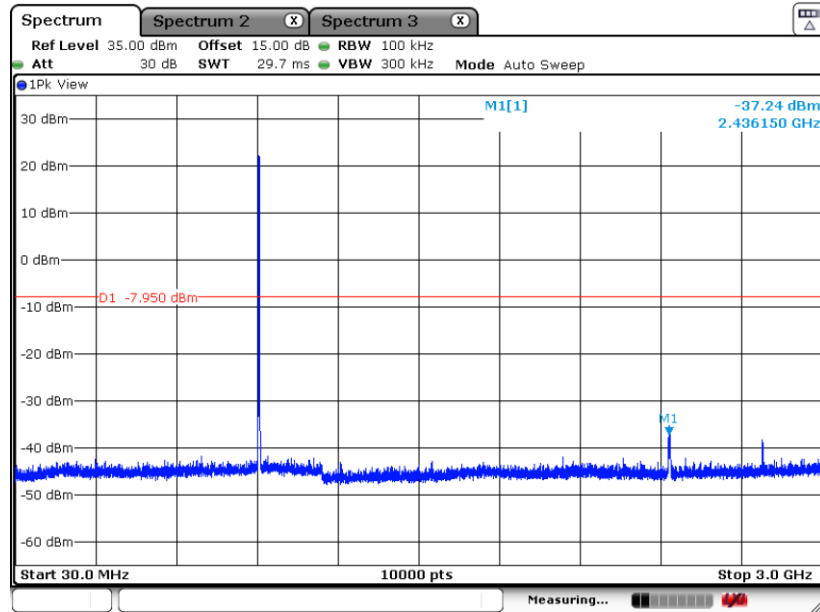
Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN.2022 14:14:31

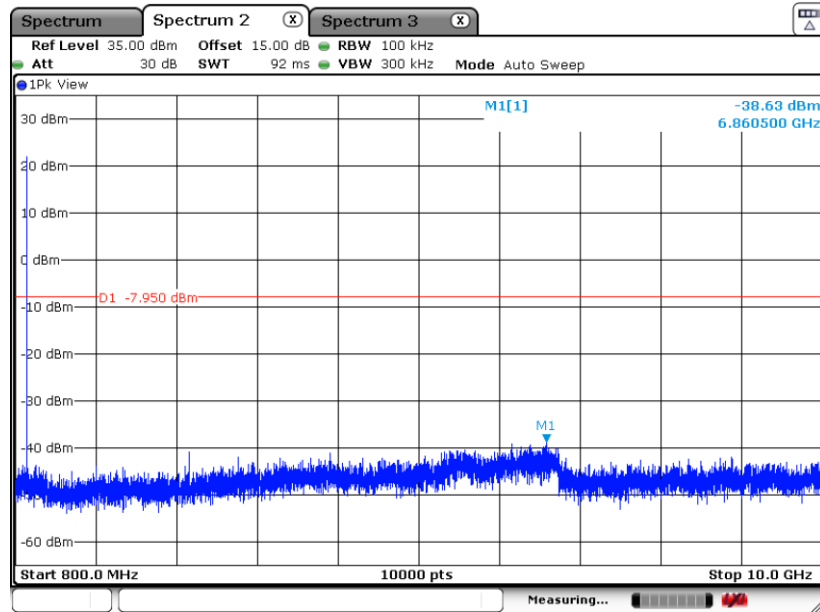


Conducted Spurious Emission Plot on 926.5 MHz



Date: 25 JUN 2022 14:27:36

Conducted Spurious Emission Plot on 926.5 MHz

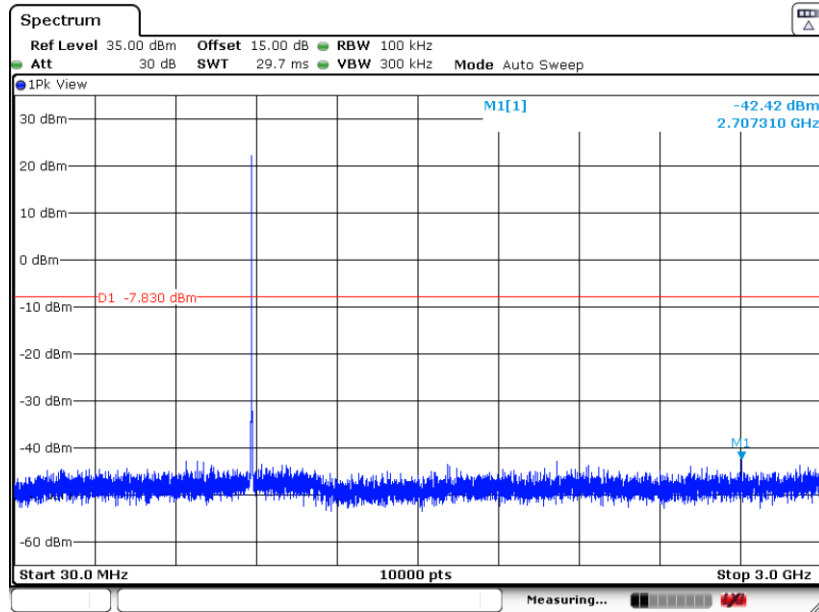


Date: 25 JUN 2022 14:28:39

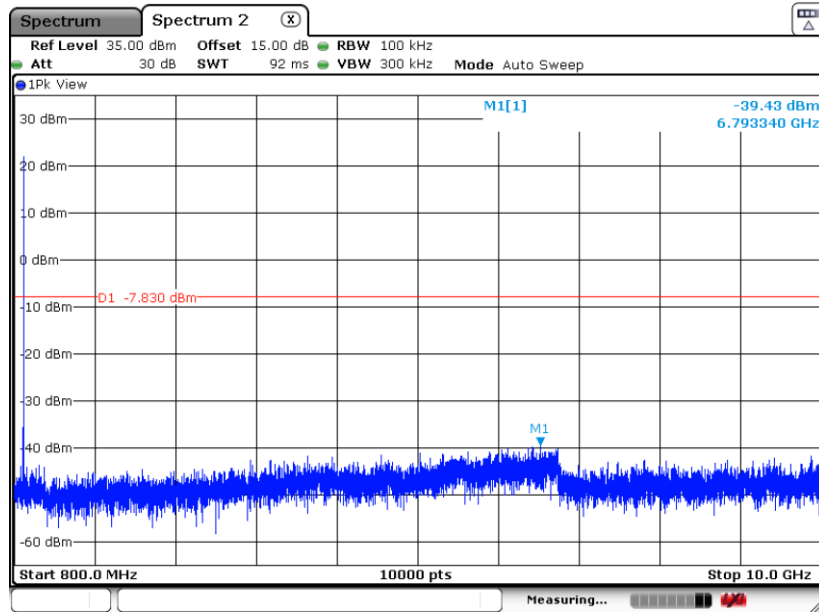


For SF9:

Conducted Spurious Emission Plot on 902.5 MHz

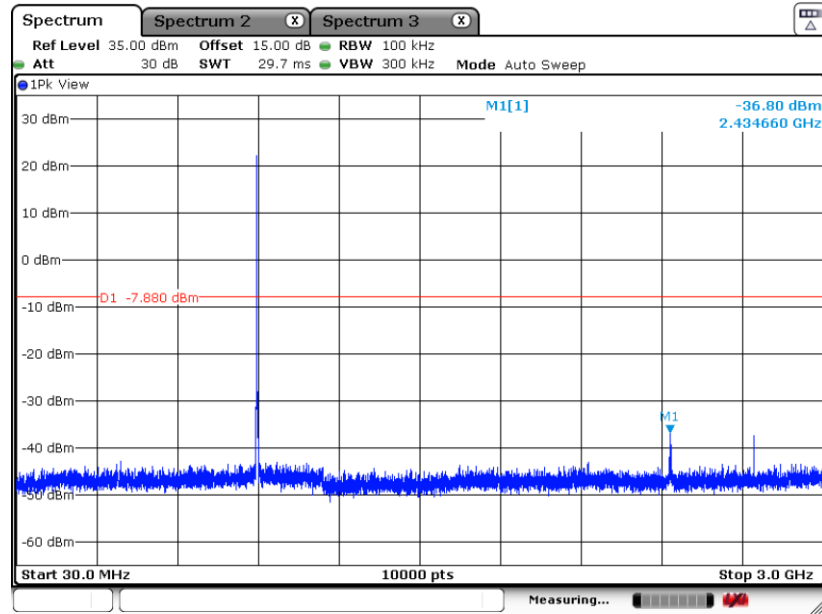


Conducted Spurious Emission Plot on 902.5 MHz



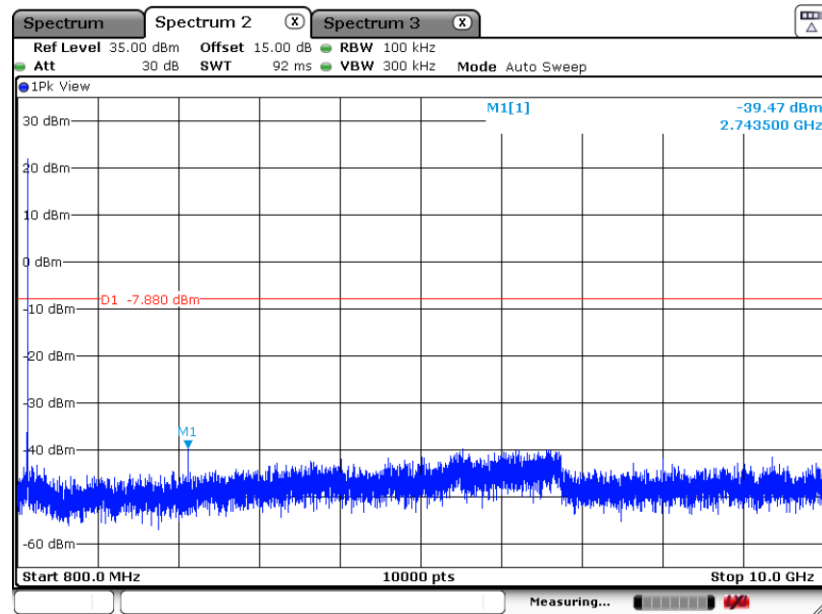


Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN 2022 15:25:12

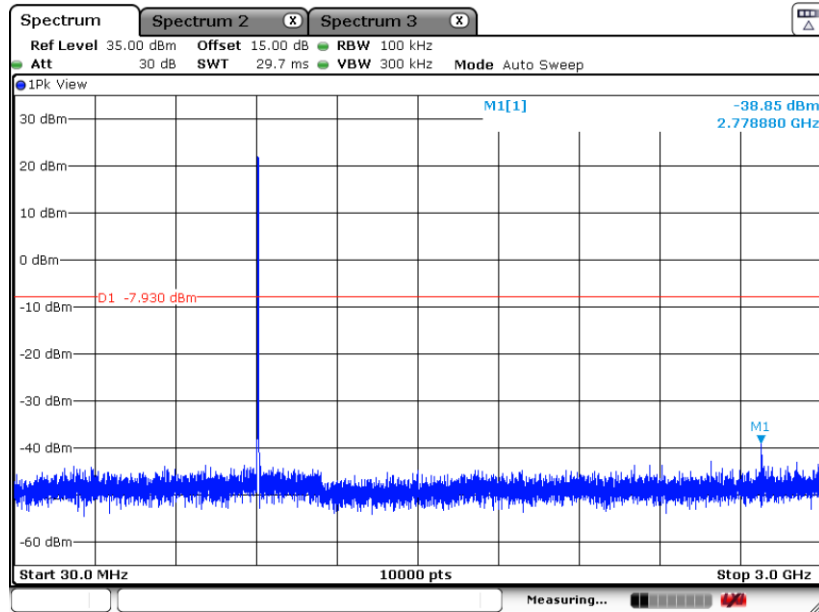
Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN 2022 15:26:06

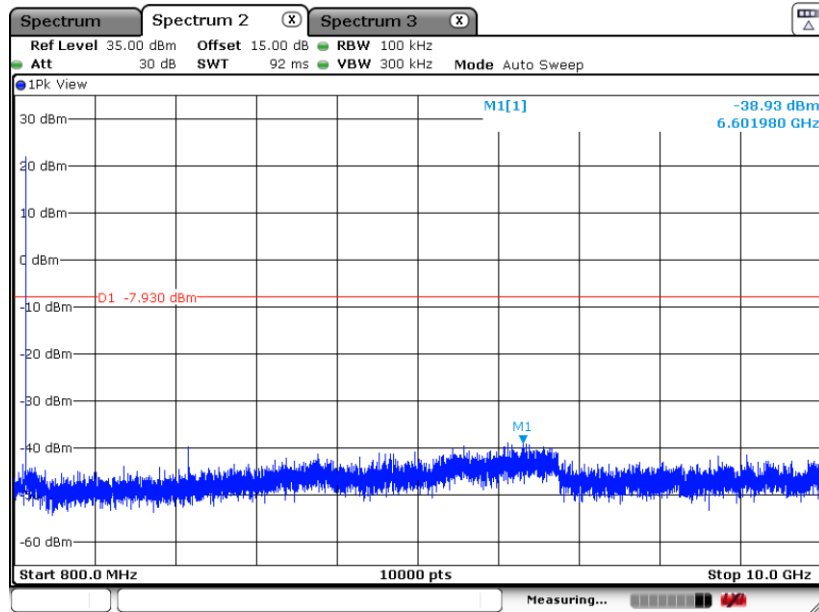


Conducted Spurious Emission Plot on 926.5 MHz



Date: 25 JUN 2022 15:28:58

Conducted Spurious Emission Plot on 926.5 MHz

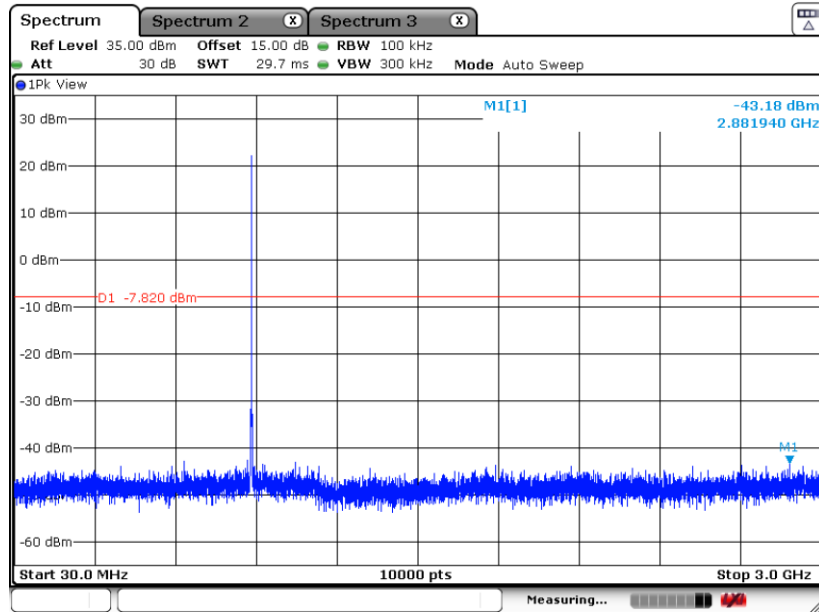


Date: 25 JUN 2022 15:29:40



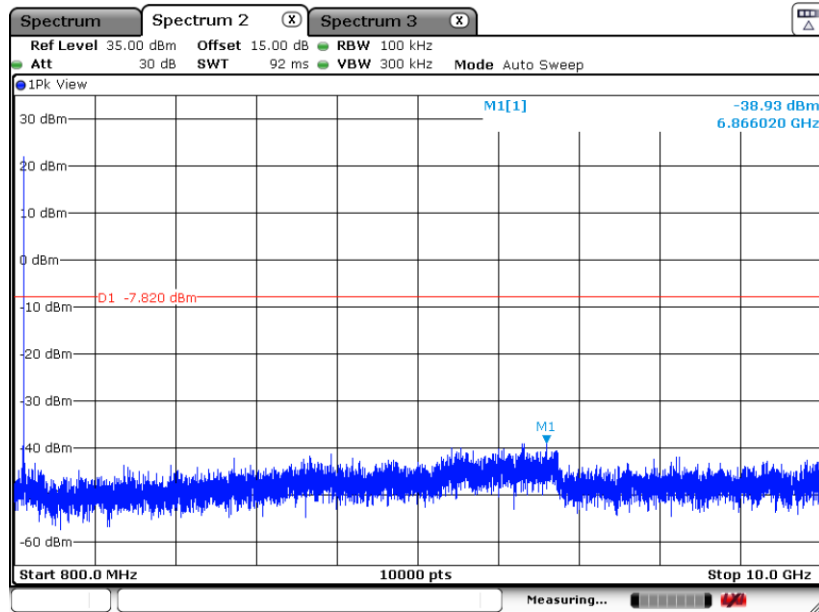
For SF10:

Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 16:07:36

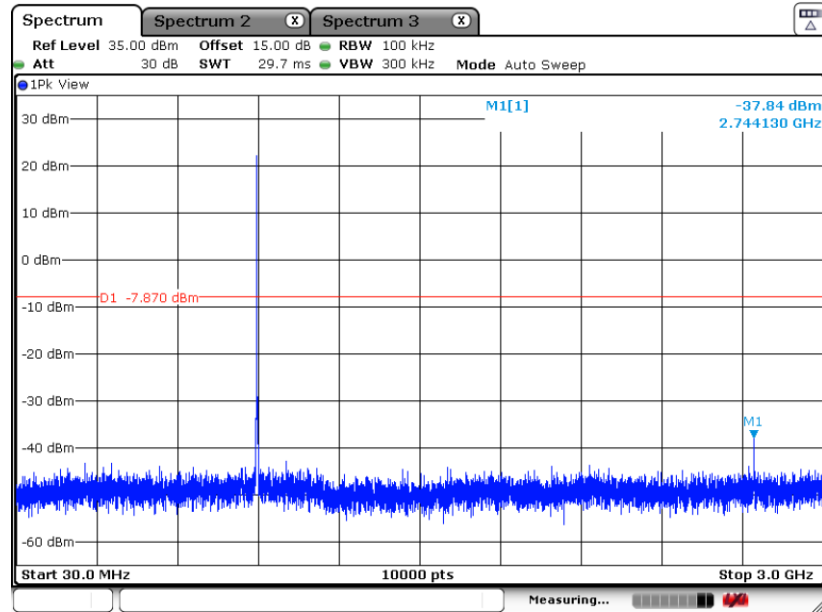
Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 16:08:17

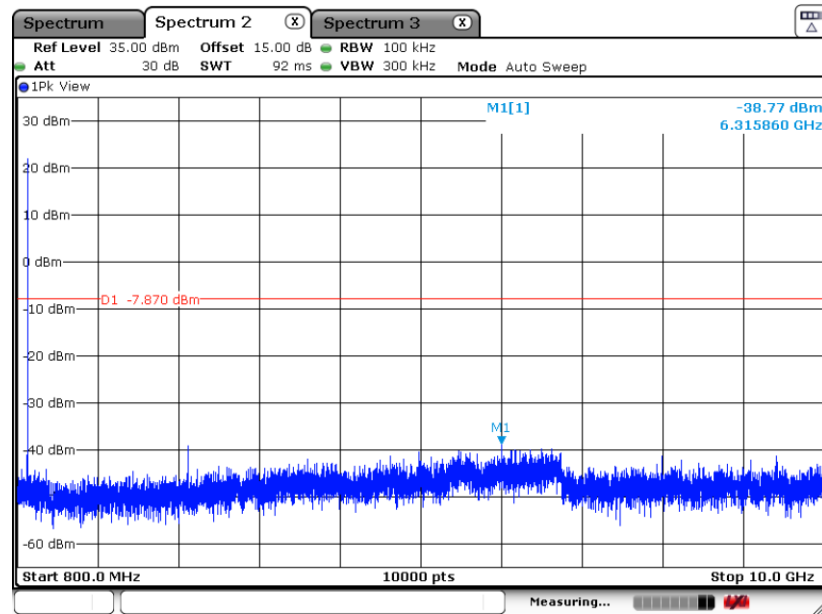


Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN.2022 16:05:23

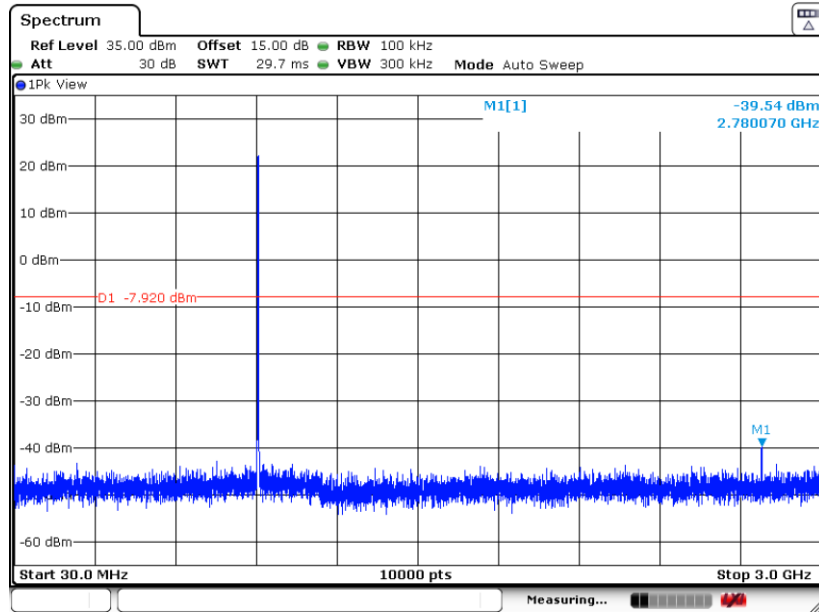
Conducted Spurious Emission Plot on 914.5 MHz



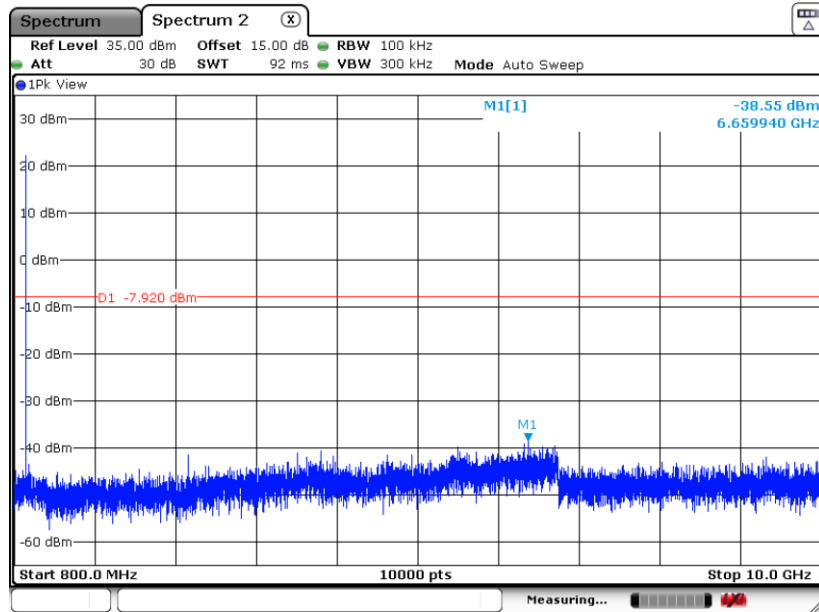
Date: 25 JUN.2022 16:05:47



Conducted Spurious Emission Plot on 926.5 MHz



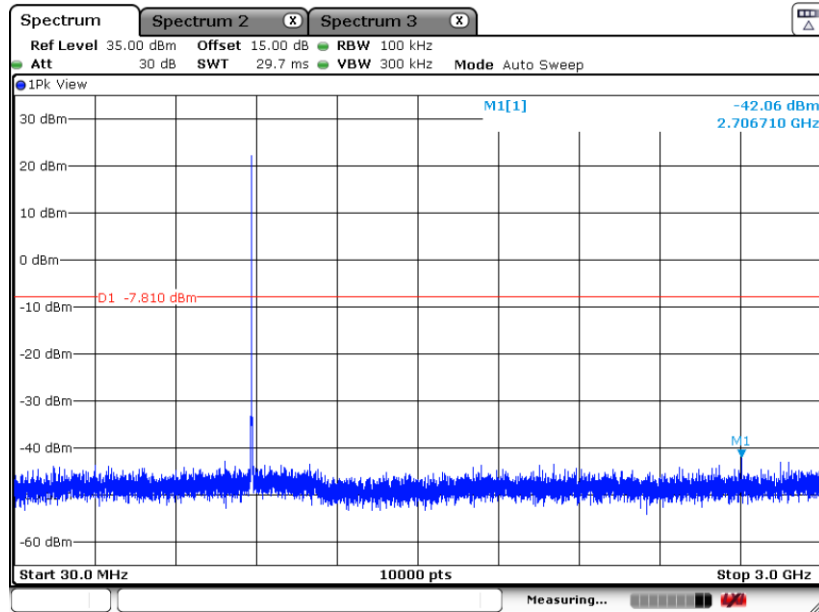
Conducted Spurious Emission Plot on 926.5 MHz





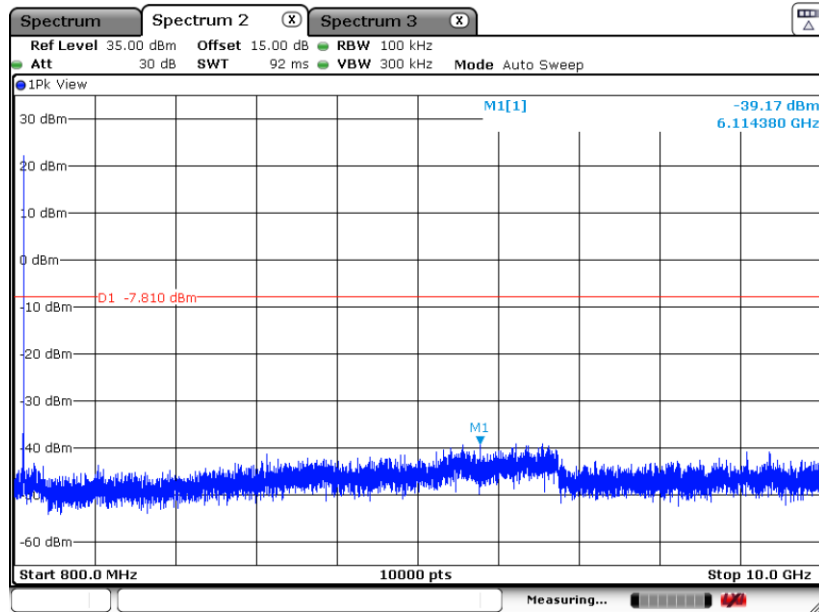
For SF11:

Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 16:37:04

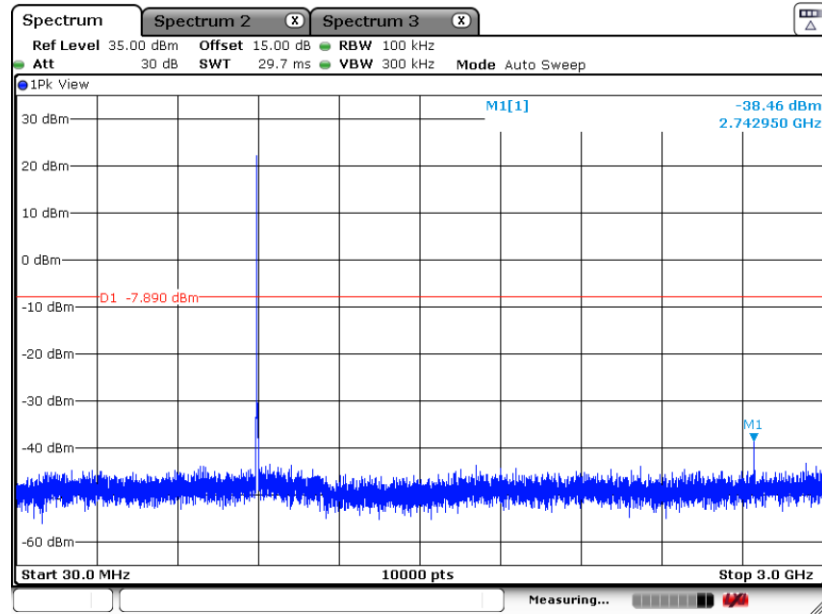
Conducted Spurious Emission Plot on 902.5 MHz



Date: 25 JUN 2022 16:37:35

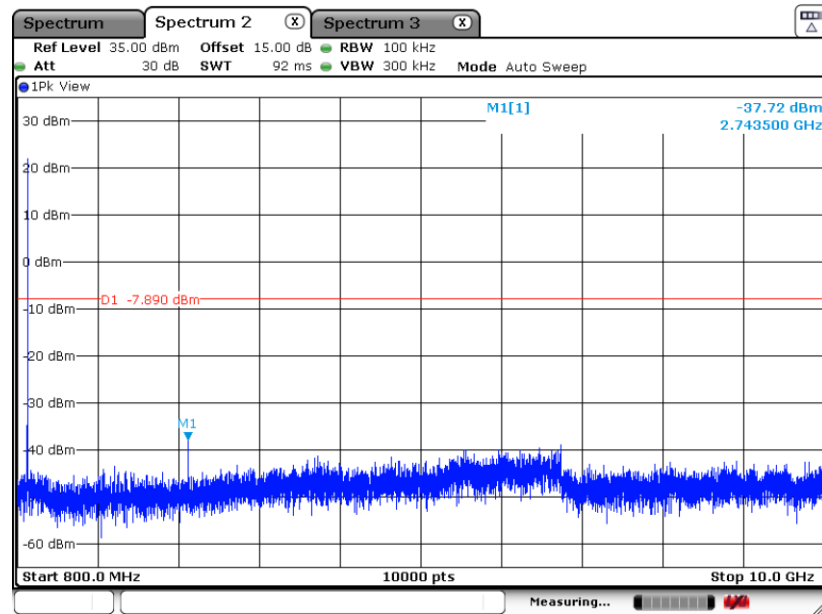


Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN 2022 16:34:51

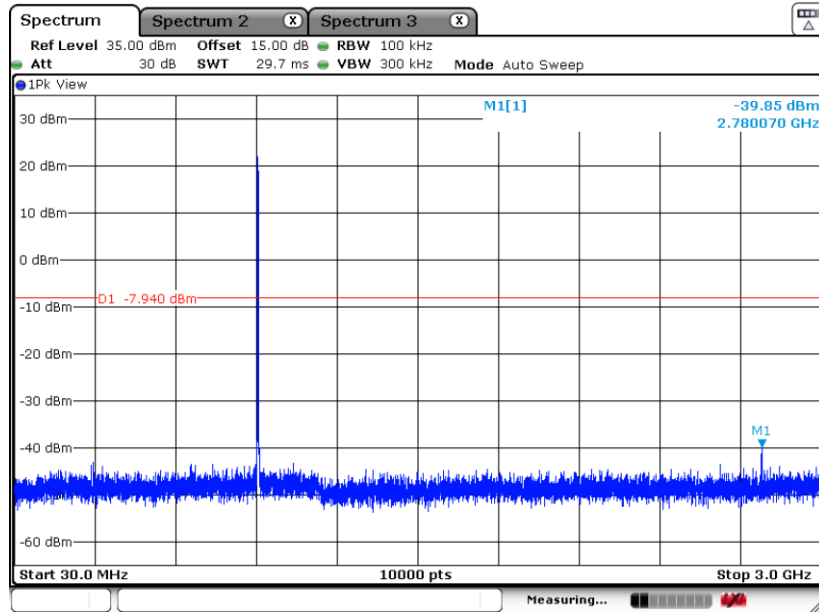
Conducted Spurious Emission Plot on 914.5 MHz



Date: 25 JUN 2022 16:35:19

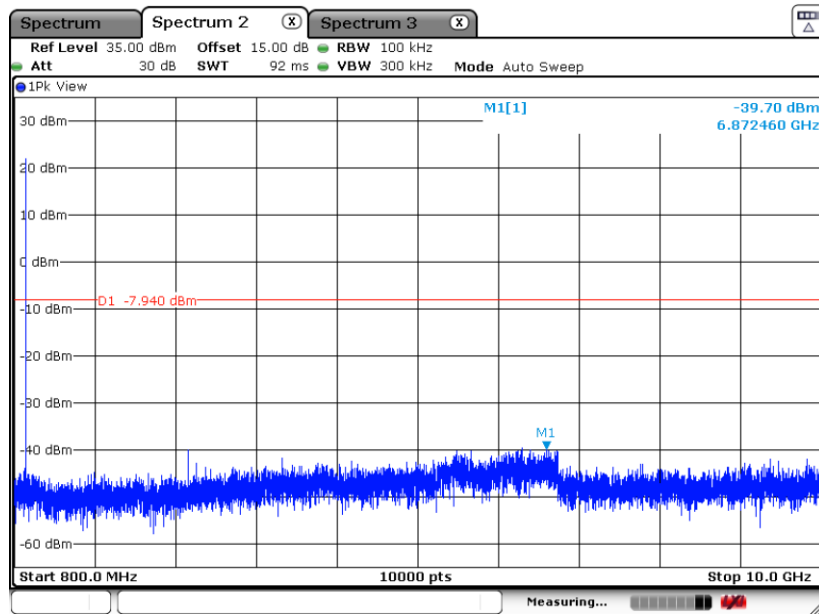


Conducted Spurious Emission Plot on 926.5 MHz



Date: 25 JUN 2022 16:38:47

Conducted Spurious Emission Plot on 926.5 MHz



Date: 25 JUN 2022 16:39:39



3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.5.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

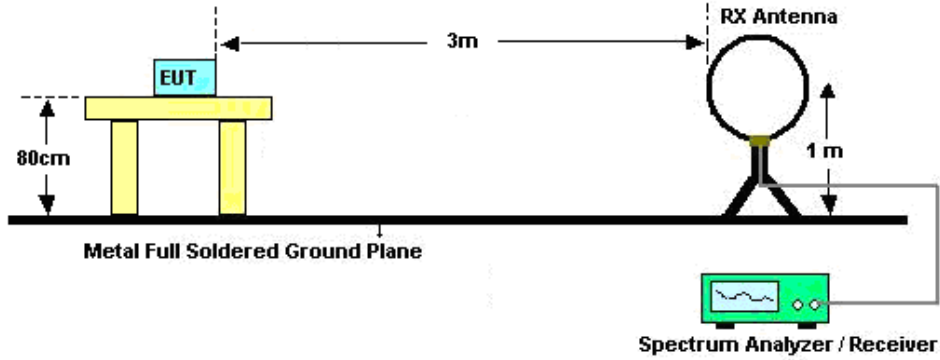


3.5.3 Test Procedures

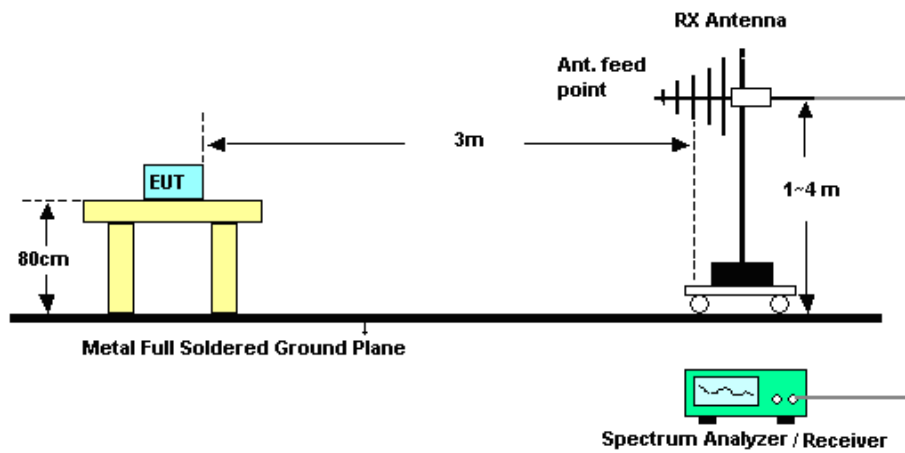
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; $VBW \geq RBW$; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.
For average measurement:
 - $VBW = 10$ Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

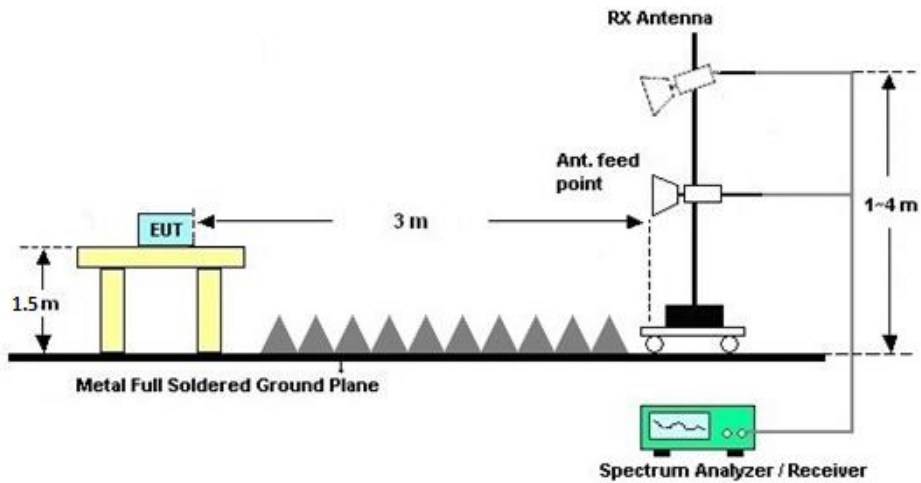
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





3.5.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.5.7 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix C.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

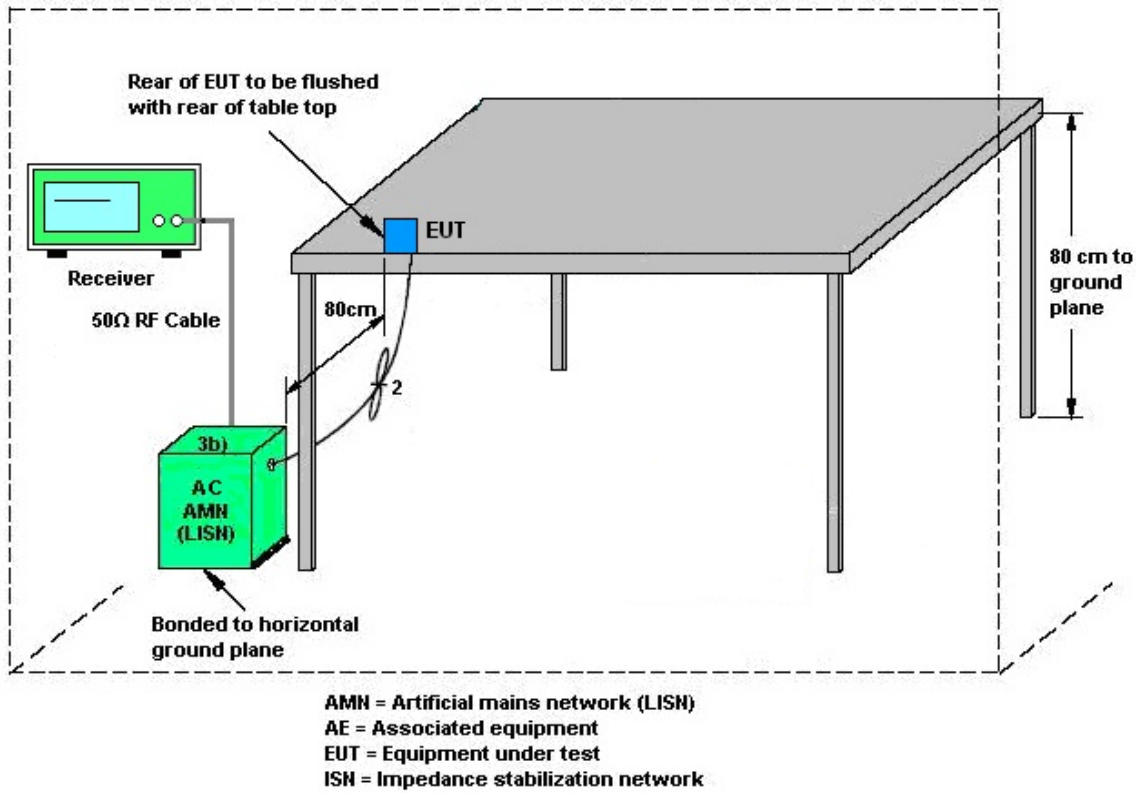
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 14, 2021	Jun. 25, 2022~ Aug. 02, 2022	Oct. 13, 2022	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 05, 2022	Jun. 25, 2022~ Aug. 02, 2022	Jan. 04, 2023	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 05, 2022	Jun. 25, 2022~ Aug. 02, 2022	Jan. 04, 2023	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Ma x 30dBm	Oct. 16, 2021	Jul. 23, 2022	Oct. 15, 2022	Radiation (03CH08-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY574710 84	10Hz-44G,MAX 30dB	Jul. 11, 2022	Jul. 23, 2022	Jul. 10, 2023	Radiation (03CH08-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 30, 2021	Jul. 23, 2022	Oct. 29, 2022	Radiation (03CH08-KS)
Bilog Antenna	TESEQ& VGT	CBL 61110	59915	30MHz-1GHz	Sep. 02, 2021	Jul. 23, 2022	Sep. 01, 2022	Radiation (03CH08-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00240138	1GHz~18GHz	Jul. 18, 2022	Jul. 23, 2022	Jul. 17, 2023	Radiation (03CH08-KS)
high gain Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	2025788	1Ghz-18Ghz	Jul. 30, 2021	Jul. 23, 2022	Jul. 29, 2022	Radiation (03CH08-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2022	Jul. 23, 2022	Jan. 04, 2023	Radiation (03CH08-KS)
Amplifier	SONOMA	310N	413741	9KHz-1GHz	Jan. 05, 2022	Jul. 23, 2022	Jan. 04, 2023	Radiation (03CH08-KS)
Amplifier	Keysight	83017A	MY532703 89	500MHz~26.5G Hz	Jan. 05, 2022	Jul. 23, 2022	Jan. 04, 2023	Radiation (03CH08-KS)
Amplifier	MITEQ	EM18G40GG A	060728	18~40GHz	Jan. 05, 2022	Jul. 23, 2022	Jan. 04, 2023	Radiation (03CH08-KS)
AC Power Source	Chroma	61601	616010002 473	N/A	NCR	Jul. 23, 2022	NCR	Radiation (03CH08-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jul. 23, 2022	NCR	Radiation (03CH08-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jul. 23, 2022	NCR	Radiation (03CH08-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	May 24, 2022	Jul. 21, 2022	May 23, 2023	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 14, 2021	Jul. 21, 2022	Oct. 13, 2022	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	May 24, 2022	Jul. 21, 2022	May 23, 2023	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP00000 0811	AC 0V~300V, 45Hz~1000Hz	Oct. 14, 2021	Jul. 21, 2022	Oct. 13, 2022	Conduction (CO01-KS)

NCR: No Calibration Required



5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±0.56 dB
Conducted Emissions	±0.92 dB
Occupied Channel Bandwidth	±0.03 %
Conducted Power Spectral Density	±0.54 dB

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.94dB
---	--------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9dB
---	-------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB
---	-------



Appendix A. Conducted Test Results

Test Engineer:	Albert Shi	Temperature:	20~26°C
Test Date:	2022/6/25~2022/8/2	Relative Humidity:	40~51%

LoRa-DTS-Spreading Factor 5**TEST RESULTS DATA**
6dB and 99% Occupied Bandwidth

Mod.	Channel	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
SF5	1	902.5Mhz	0.414	0.510	0.500	Pass
SF5	16	914.5Mhz	0.535	0.599	0.500	Pass
SF5	31	926.5Mhz	0.515	0.579	0.500	Pass

TEST RESULTS DATA
Average Power Table

Mod.	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
SF5	1	902.5Mhz	0.19	16.58
SF5	16	914.5Mhz	0.19	16.45
SF5	31	926.5Mhz	0.19	16.37

TEST RESULTS DATA
Peak Power Density

Mod.	Channel	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
SF5	1	902.5Mhz	16.38	6.71	-1.81	8.00	Pass
SF5	16	914.5Mhz	16.26	2.52	-1.81	8.00	Pass
SF5	31	926.5Mhz	15.98	2.89	-1.81	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 30dBc limit.

LoRa-DTS-Spreading Factor 7**TEST RESULTS DATA**
6dB and 99% Occupied Bandwidth

Mod.	Channel	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
SF7	1	902.5Mhz	0.480	0.596	0.500	Pass
SF7	16	914.5Mhz	0.521	0.622	0.500	Pass
SF7	31	926.5Mhz	0.507	0.622	0.500	Pass

TEST RESULTS DATA
Average Power Table

Mod.	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
SF7	1	902.5Mhz	0.05	21.70
SF7	16	914.5Mhz	0.05	21.60
SF7	31	926.5Mhz	0.05	21.82

TEST RESULTS DATA
Peak Power Density

Mod.	Channel	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
SF7	1	902.5Mhz	22.19	5.25	-1.81	8.00	Pass
SF7	16	914.5Mhz	22.13	2.93	-1.81	8.00	Pass
SF7	31	926.5Mhz	22.06	2.44	-1.81	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 30dBc limit.

LoRa-DTS-Spreading Factor 8**TEST RESULTS DATA**
6dB and 99% Occupied Bandwidth

Mod.	Channel	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
SF8	1	902.5Mhz	0.495	0.617	0.500	Pass
SF8	16	914.5Mhz	0.524	0.634	0.500	Pass
SF8	31	926.5Mhz	0.515	0.631	0.500	Pass

TEST RESULTS DATA
Average Power Table

Mod.	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
SF8	1	902.5Mhz	0.03	21.78
SF8	16	914.5Mhz	0.03	21.66
SF8	31	926.5Mhz	0.03	21.88

TEST RESULTS DATA
Peak Power Density

Mod.	Channel	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
SF8	1	902.5Mhz	22.20	3.35	-1.81	8.00	Pass
SF8	16	914.5Mhz	22.12	2.11	-1.81	8.00	Pass
SF8	31	926.5Mhz	22.05	2.04	-1.81	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 30dBc limit.

LoRa-DTS-Spreading Factor 9**TEST RESULTS DATA**
6dB and 99% Occupied Bandwidth

Mod.	Channel	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
SF9	1	902.5Mhz	0.507	0.628	0.500	Pass
SF9	16	914.5Mhz	0.518	0.634	0.500	Pass
SF9	31	926.5Mhz	0.515	0.634	0.500	Pass

TEST RESULTS DATA
Average Power Table

Mod.	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
SF9	1	902.5Mhz	0.01	21.93
SF9	16	914.5Mhz	0.01	21.89
SF9	31	926.5Mhz	0.01	21.96

TEST RESULTS DATA
Peak Power Density

Mod.	Channel	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
SF9	1	902.5Mhz	22.17	3.34	-1.81	8.00	Pass
SF9	16	914.5Mhz	22.12	1.95	-1.81	8.00	Pass
SF9	31	926.5Mhz	22.07	1.65	-1.81	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 30dBc limit.

LoRa-DTS-Spreading Factor 10**TEST RESULTS DATA**
6dB and 99% Occupied Bandwidth

Mod.	Channel	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
SF10	1	902.5Mhz	0.512	0.634	0.500	Pass
SF10	16	914.5Mhz	0.521	0.637	0.500	Pass
SF10	31	926.5Mhz	0.518	0.640	0.500	Pass

TEST RESULTS DATA
Average Power Table

Mod.	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
SF10	1	902.5Mhz	0.01	21.83
SF10	16	914.5Mhz	0.01	21.78
SF10	31	926.5Mhz	0.01	21.90

TEST RESULTS DATA
Peak Power Density

Mod.	Channel	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
SF10	1	902.5Mhz	22.18	2.90	-1.81	8.00	Pass
SF10	16	914.5Mhz	22.13	1.67	-1.81	8.00	Pass
SF10	31	926.5Mhz	22.08	1.49	-1.81	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 30dBc limit.

LoRa-DTS-Spreading Factor 11**TEST RESULTS DATA**
6dB and 99% Occupied Bandwidth

Mod.	Channel	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
SF11	1	902.5Mhz	0.512	0.637	0.500	Pass
SF11	16	914.5Mhz	0.524	0.637	0.500	Pass
SF11	31	926.5Mhz	0.521	0.640	0.500	Pass

TEST RESULTS DATA
Average Power Table

Mod.	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
SF11	1	902.5Mhz	0.00	21.75
SF11	16	914.5Mhz	0.00	21.83
SF11	31	926.5Mhz	0.00	21.89

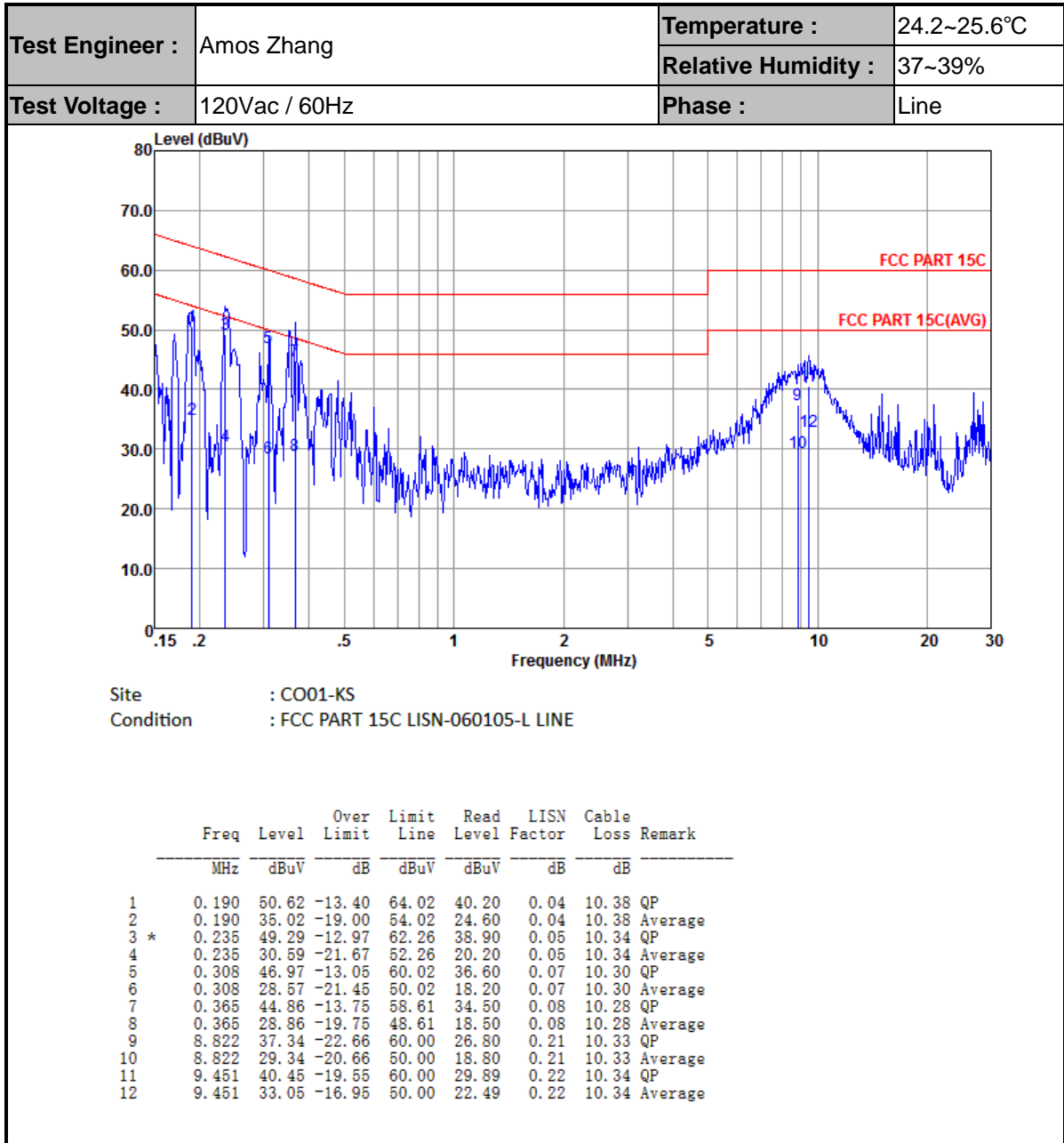
TEST RESULTS DATA
Peak Power Density

Mod.	Channel	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
SF11	1	902.5Mhz	22.19	2.24	-1.81	8.00	Pass
SF11	16	914.5Mhz	22.11	1.70	-1.81	8.00	Pass
SF11	31	926.5Mhz	22.06	1.65	-1.81	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 30dBc limit.

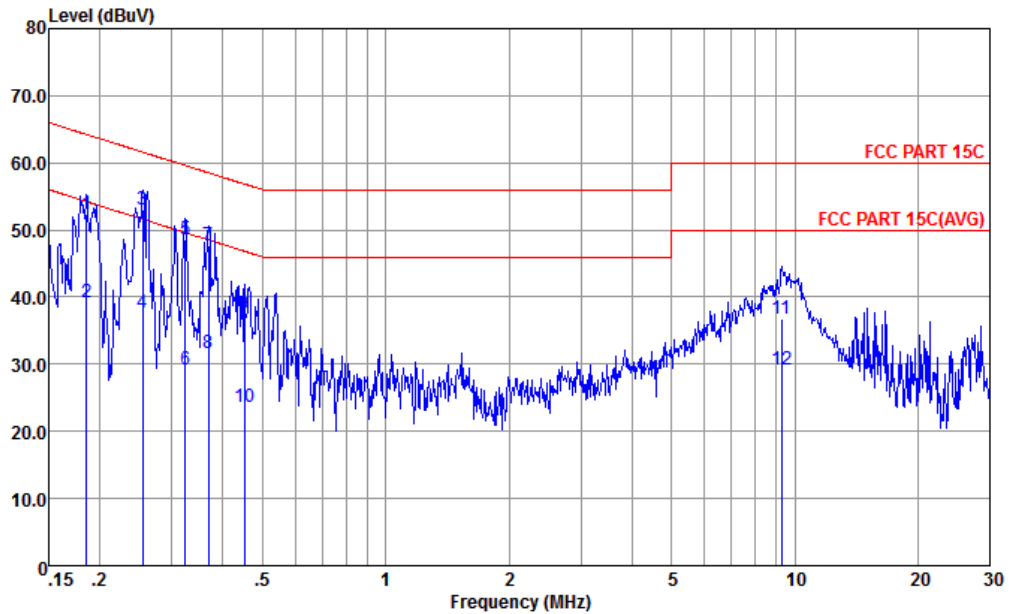


Appendix B. AC Conducted Emission Test Results





Test Engineer :	Amos Zhang	Temperature :	24.2~25.6°C
		Relative Humidity :	37~39%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-KS
Condition : FCC PART 15C LISN-060105-N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.185	52.30	-11.94	64.24	41.81	0.10	10.39	QP
2	0.185	39.30	-14.94	54.24	28.81	0.10	10.39	Average
3 *	0.255	53.03	-8.57	61.60	42.60	0.10	10.33	QP
4	0.255	37.63	-13.97	51.60	27.20	0.10	10.33	Average
5	0.323	48.60	-11.02	59.62	38.20	0.10	10.30	QP
6	0.323	29.20	-20.42	49.62	18.80	0.10	10.30	Average
7	0.369	47.58	-10.94	58.52	37.20	0.10	10.28	QP
8	0.369	31.68	-16.84	48.52	21.30	0.10	10.28	Average
9	0.452	37.46	-19.39	56.85	27.10	0.11	10.25	QP
10	0.452	23.66	-23.19	46.85	13.30	0.11	10.25	Average
11	9.302	36.76	-23.24	60.00	26.21	0.22	10.33	QP
12	9.302	29.16	-20.84	50.00	18.61	0.22	10.33	Average

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



Appendix C. Radiated Spurious Emission

902~928MHz

LoRa DTS SF=5 (Band Edge @ 3m)

	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
		(MHz)	(dBμV/m)	(dB)	Limit	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
					Line	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		903	119.8	-	-	118.28	29.09	4.79	32.36	100	0	P	H
		977.69	43.49	-10.51	54	39.66	30.43	4.98	31.58	100	0	P	H
		902.03	115.32	-	-	113.85	29.06	4.78	32.37	200	0	P	V
		983.51	40.43	-13.57	54	36.55	30.4	5	31.52	200	0	P	V
914.5MHz		914.64	120.01	-	-	117.95	29.47	4.82	32.23	100	0	P	H
		971.87	41.85	-12.15	54	38.04	30.47	4.97	31.63	100	0	P	H
		914.64	115.09	-	-	113.03	29.47	4.82	32.23	200	0	P	V
		993.21	40.33	-13.67	54	36.38	30.34	5.03	31.42	200	0	P	V
926.5MHz		926.28	115.85	-	-	113.27	29.85	4.84	32.11	100	0	P	H
		969.93	38.38	-15.62	54	34.59	30.48	4.96	31.65	100	0	P	H
		926.28	115.46	-	-	112.88	29.85	4.84	32.11	200	0	P	V
		972.84	39.96	-14.04	54	36.15	30.46	4.97	31.62	200	0	P	V
Remark	<ol style="list-style-type: none"> 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Non-restricted band limit is 100kHz-PSD down 30dB. 												



LoRa DTS SF=5 (Harmonic @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		1441	45.46	-28.54	74	76.03	28.02	6.06	64.65	300	0	P	H
		1801	35.89	-53.91	89.8	63.9	29.94	6.77	64.72	300	0	P	H
		2710	41.23	-32.77	74	65.51	32.44	8.38	65.1	300	0	P	H
		1441	41.83	-32.17	74	72.4	28.02	6.06	64.65	100	0	P	V
		1805	35.6	-49.72	85.32	63.61	29.94	6.77	64.72	100	0	P	V
		2710	38.58	-35.42	74	62.86	32.44	8.38	65.1	100	0	P	V
914.5MHz		1441	45.79	-28.21	74	76.36	28.02	6.06	64.65	300	0	P	H
		1828	35.88	-54.13	90.01	63.61	30.15	6.84	64.72	300	0	P	H
		2746	40.35	-33.65	74	64.55	32.48	8.43	65.11	300	0	P	H
		1829	36.84	-48.25	85.09	64.57	30.15	6.84	64.72	100	0	P	V
		2746	42.12	-31.88	74	66.32	32.48	8.43	65.11	100	0	P	V
926.5MHz		1441	45.86	-28.14	74	76.43	28.02	6.06	64.65	300	360	P	H
		1853	36.03	-49.82	85.85	63.62	30.26	6.87	64.72	300	360	P	H
		2782	40.26	-33.74	74	64.37	32.52	8.49	65.12	300	360	P	H
		1855	37.29	-48.17	85.46	64.88	30.26	6.87	64.72	100	360	P	V
		2782	40.26	-33.74	74	64.37	32.52	8.49	65.12	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Non-restricted band limit is 100kHz-PSD down 30dB.												



LoRa DTS SF=7 (Band Edge @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		903	119.29	-	-	117.77	29.09	4.79	32.36	100	0	P	H
		997.09	40.64	-13.36	54	36.66	30.32	5.04	31.38	100	0	P	H
		902.03	117.2	-	-	115.73	29.06	4.78	32.37	200	0	P	V
		979.63	40.98	-13.02	54	37.13	30.42	4.99	31.56	200	0	P	V
914.5MHz		914.64	118.94	-	-	116.88	29.47	4.82	32.23	100	0	P	H
		998.06	40.34	-13.66	54	36.36	30.31	5.04	31.37	100	0	P	H
		914.64	118.23	-	-	116.17	29.47	4.82	32.23	200	0	P	V
		989.33	40.51	-13.49	54	36.59	30.36	5.02	31.46	200	0	P	V
926.5MHz		926.28	117.93	-	-	115.35	29.85	4.84	32.11	100	0	P	H
		984.48	39.38	-14.62	54	35.5	30.39	5	31.51	100	0	P	H
		926.28	117.5	-	-	114.92	29.85	4.84	32.11	200	0	P	V
		968.96	40.52	-13.48	54	36.74	30.48	4.96	31.66	200	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Non-restricted band limit is 100kHz-PSD down 30dB.												



LoRa DTS SF=7 (Harmonic @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		1441	45.71	-28.29	74	76.28	28.02	6.06	64.65	300	360	P	H
		1805	37.02	-52.27	89.29	65.03	29.94	6.77	64.72	300	360	P	H
		2710	42.91	-31.09	74	67.19	32.44	8.38	65.1	300	360	P	H
		1801	34.89	-52.31	87.2	62.9	29.94	6.77	64.72	300	0	P	V
		2710	38.27	-35.73	74	62.55	32.44	8.38	65.1	300	0	P	V
914.5MHz		1828	37.08	-51.86	88.94	64.81	30.15	6.84	64.72	100	360	P	H
		2743.5	41.9	-32.1	74	66.1	32.48	8.43	65.11	100	360	P	H
		1829	38.21	-50.02	88.23	65.94	30.15	6.84	64.72	300	360	P	V
		2746	41.85	-32.15	74	66.05	32.48	8.43	65.11	300	360	P	V
926.5MHz		1855	36.59	-51.34	87.93	64.18	30.26	6.87	64.72	300	0	P	H
		2779.5	42.41	-31.59	74	66.52	32.52	8.49	65.12	300	0	P	H
		1853	36.98	-50.52	87.5	64.57	30.26	6.87	64.72	100	0	P	V
		2782	41.92	-32.08	74	66.03	32.52	8.49	65.12	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Non-restricted band limit is 100kHz-PSD down 30dB.												



LoRa DTS SF=8 (Band Edge @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		903	119.16	-	-	117.64	29.09	4.79	32.36	100	0	P	H
		965.08	42.41	-11.59	54	38.65	30.51	4.95	31.7	100	0	P	H
		903	117.84	-	-	116.32	29.09	4.79	32.36	200	0	P	V
		984.48	40.89	-13.11	54	37.01	30.39	5	31.51	200	0	P	V
914.5MHz		914.64	118.79	-	-	116.73	29.47	4.82	32.23	200	0	P	H
		982.54	40.24	-13.76	54	36.37	30.4	5	31.53	200	0	P	H
		914.64	117.58	-	-	115.52	29.47	4.82	32.23	100	0	P	V
		969.93	41.53	-12.47	54	37.74	30.48	4.96	31.65	100	0	P	V
926.5MHz		926.28	117.71	-	-	115.13	29.85	4.84	32.11	100	0	P	H
		993.21	38.84	-15.16	54	34.89	30.34	5.03	31.42	100	0	P	H
		926.28	118.43	-	-	115.85	29.85	4.84	32.11	200	0	P	V
		984.48	39.79	-14.21	54	35.91	30.39	5	31.51	200	0	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. Non-restricted band limit is 100kHz-PSD down 30dB. 												



LoRa DTS SF=8 (Harmonic @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		1805	38.38	-50.78	89.16	66.39	29.94	6.77	64.72	300	0	P	H
		2710	43.54	-30.46	74	67.82	32.44	8.38	65.1	300	0	P	H
		1801	38.8	-49.04	87.84	66.81	29.94	6.77	64.72	100	0	P	V
		2707.5	42.35	-31.65	74	66.67	32.42	8.35	65.09	100	0	P	V
914.5MHz		1828	35.91	-52.88	88.79	63.64	30.15	6.84	64.72	300	0	P	H
		2743.5	37.34	-36.66	74	61.54	32.48	8.43	65.11	300	0	P	H
		1829	35.32	-52.26	87.58	63.05	30.15	6.84	64.72	100	0	P	V
		2746	36.96	-37.04	74	61.16	32.48	8.43	65.11	100	0	P	V
926.5MHz		1853	36.95	-50.76	87.71	64.54	30.26	6.87	64.72	300	0	P	H
		2779.5	42.22	-31.78	74	66.33	32.52	8.49	65.12	300	0	P	H
		1855	37.59	-50.84	88.43	65.18	30.26	6.87	64.72	100	0	P	V
		2779.5	42.02	-31.98	74	66.13	32.52	8.49	65.12	100	0	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. Non-restricted band limit is 100kHz-PSD down 30dB. 												



LoRa DTS SF=9 (Band Edge @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		903	119.15	-	-	117.63	29.09	4.79	32.36	100	0	P	H
		992.24	39.23	-14.77	54	35.28	30.35	5.03	31.43	100	0	P	H
		903	118.95	-	-	117.43	29.09	4.79	32.36	200	0	P	V
		974.78	42.49	-11.51	54	38.66	30.45	4.98	31.6	200	0	P	V
914.5MHz		914.64	118.7	-	-	116.64	29.47	4.82	32.23	100	0	P	H
		968.96	38.79	-15.21	54	35.01	30.48	4.96	31.66	100	0	P	H
		914.64	116.51	-	-	114.45	29.47	4.82	32.23	200	0	P	V
		982.54	40.51	-13.49	54	36.64	30.4	5	31.53	200	0	P	V
926.5MHz		926.28	117.68	-	-	115.1	29.85	4.84	32.11	100	0	P	H
		993.21	38.88	-15.12	54	34.93	30.34	5.03	31.42	100	0	P	H
		926.28	117.26	-	-	114.68	29.85	4.84	32.11	200	0	P	V
		973.81	39.46	-14.54	54	35.64	30.46	4.97	31.61	200	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Non-restricted band limit is 100kHz-PSD down 30dB.												



LoRa DTS SF=9 (Harmonic @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		1801	39.73	-49.42	89.15	67.74	29.94	6.77	64.72	300	0	P	H
		2707.5	43.59	-30.41	74	67.91	32.42	8.35	65.09	300	0	P	H
		1801	39.43	-49.52	88.95	67.44	29.94	6.77	64.72	100	0	P	V
		2707.5	43.59	-30.41	74	67.91	32.42	8.35	65.09	100	0	P	V
914.5MHz		1828	35.49	-53.21	88.7	63.22	30.15	6.84	64.72	100	121	P	H
		2743.5	41.84	-32.16	74	66.04	32.48	8.43	65.11	100	121	P	H
		1828	38.71	-47.8	86.51	66.44	30.15	6.84	64.72	300	360	P	V
		2743.5	42.08	-31.92	74	66.28	32.48	8.43	65.11	300	360	P	V
926.5MHz		1855	35.87	-51.81	87.68	63.46	30.26	6.87	64.72	100	0	P	H
		2779.5	40.91	-33.09	74	65.02	32.52	8.49	65.12	100	0	P	H
		1855	36.43	-50.83	87.26	64.02	30.26	6.87	64.72	100	0	P	V
		2779.5	41.34	-32.66	74	65.45	32.52	8.49	65.12	100	0	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. Non-restricted band limit is 100kHz-PSD down 30dB. 												



LoRa DTS SF=10 (Band Edge @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		903	119.13	-	-	117.61	29.09	4.79	32.36	100	0	P	H
		963.14	40.96	-13.04	54	37.22	30.52	4.94	31.72	100	0	P	H
		903	117.74	-	-	116.22	29.09	4.79	32.36	200	0	P	V
		967.02	40.77	-13.23	54	37	30.5	4.95	31.68	200	0	P	V
914.5MHz		914.64	118.55	-	-	116.49	29.47	4.82	32.23	100	0	P	H
		993.21	39.78	-14.22	54	35.83	30.34	5.03	31.42	100	0	P	H
		914.64	117.58	-	-	115.52	29.47	4.82	32.23	200	0	P	V
		990.3	40.47	-13.53	54	36.54	30.36	5.02	31.45	200	0	P	V
926.5MHz		926.28	113.45	-	-	110.87	29.85	4.84	32.11	200	0	P	H
		981.57	33.99	-20.01	54	30.12	30.41	5	31.54	200	0	P	H
		926.28	109.26	-	-	106.68	29.85	4.84	32.11	100	0	P	V
		989.33	34.73	-19.27	54	30.81	30.36	5.02	31.46	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. Non-restricted band limit is 100kHz-PSD down 30dB.												



LoRa DTS SF=10 (Harmonic @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		1801	37.98	-51.15	89.13	65.99	29.94	6.77	64.72	300	0	P	H
		2707.5	43.17	-30.83	74	67.49	32.42	8.35	65.09	300	0	P	H
		1801	37.87	-49.87	87.74	65.88	29.94	6.77	64.72	100	0	P	V
		2707.5	42.82	-31.18	74	67.14	32.42	8.35	65.09	100	0	P	V
914.5MHz		1828	35.39	-53.16	88.55	63.12	30.15	6.84	64.72	300	0	P	H
		2743.5	40.33	-33.67	74	64.53	32.48	8.43	65.11	300	0	P	H
		1828	36.71	-50.87	87.58	64.44	30.15	6.84	64.72	100	0	P	V
		2743.5	41.45	-32.55	74	65.65	32.48	8.43	65.11	100	0	P	V
926.5MHz		1855	35.65	-47.8	83.45	63.24	30.26	6.87	64.72	300	0	P	H
		2779.5	41.68	-32.32	74	65.79	32.52	8.49	65.12	300	0	P	H
		1855	36.84	-42.42	79.26	64.43	30.26	6.87	64.72	100	342	P	V
		2779.5	41.99	-32.01	74	66.1	32.52	8.49	65.12	100	342	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. Non-restricted band limit is 100kHz-PSD down 30dB. 												



LoRa DTS SF=11 (Band Edge @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		902.03	113.37	-	-	111.9	29.06	4.78	32.37	100	0	P	H
		973.81	35.24	-18.76	54	31.42	30.46	4.97	31.61	100	0	P	H
		902.03	111.67	-	-	110.2	29.06	4.78	32.37	200	0	P	V
		982.54	35.66	-18.34	54	31.79	30.4	5	31.53	200	0	P	V
914.5MHz		914.64	119.52	-	-	117.46	29.47	4.82	32.23	100	0	P	H
		988.36	42.39	-11.61	54	38.47	30.37	5.02	31.47	100	0	P	H
		914.64	117.33	-	-	115.27	29.47	4.82	32.23	200	0	P	V
		963.14	41.69	-12.31	54	37.95	30.52	4.94	31.72	200	0	P	V
926.5MHz		926.28	119.6	-	-	117.02	29.85	4.84	32.11	100	0	P	H
		999.03	40.4	-13.6	54	36.4	30.31	5.05	31.36	100	0	P	H
		926.28	115.25	-	-	112.67	29.85	4.84	32.11	200	0	P	V
		986.42	41.42	-12.58	54	37.52	30.38	5.01	31.49	200	0	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. Non-restricted band limit is 100kHz-PSD down 30dB. 												



LoRa DTS SF=11 (Harmonic @ 3m)

	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
902.5MHz		1801	38.29	-45.08	83.37	66.3	29.94	6.77	64.72	300	0	P	H
		2707	44.6	-29.4	74	68.92	32.42	8.35	65.09	300	0	P	H
		1801	38.53	-43.14	81.67	66.54	29.94	6.77	64.72	100	0	P	V
		2707.5	42.21	-31.79	74	66.53	32.42	8.35	65.09	100	0	P	V
914.5MHz		1828	37.14	-52.38	89.52	64.87	30.15	6.84	64.72	300	0	P	H
		2743.5	41.16	-32.84	74	65.36	32.48	8.43	65.11	300	0	P	H
		1828	36.14	-51.19	87.33	63.87	30.15	6.84	64.72	100	0	P	V
		2743.5	41.39	-32.61	74	65.59	32.48	8.43	65.11	100	0	P	V
926.5MHz		1855	36.45	-53.15	89.6	64.04	30.26	6.87	64.72	300	0	P	H
		2779.5	41.99	-32.01	74	66.1	32.52	8.49	65.12	300	0	P	H
		1855	36.06	-49.19	85.25	63.65	30.26	6.87	64.72	100	0	P	V
		2779.5	41.71	-32.29	74	65.82	32.52	8.49	65.12	100	0	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. Non-restricted band limit is 100kHz-PSD down 30dB. 												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical

A calculation example for radiated spurious emission is shown as below:

BLE	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 00 2402MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =
Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.